

## ABSTRACT OF THE DISCLOSURE

A method of producing cementitious mixtures containing fly ash as one of the cementitious components, under air entrainment conditions. The method involves forming a mixture comprising water, cement, fly ash, optionally other cementitious materials, aggregate, conventional chemical admixtures, and an air entrainment agent and agitating the mixture to entrain air therein. Additionally, at least one sacrificial agent is also included in the mixture. The sacrificial agent is a material or mixture of materials that is not required to act as an air entrainment agent but interacts preferentially with components of the fly ash that otherwise neutralize, repress or depress the activity of the air entrainment agent. The invention includes cementitious mixtures and hardened concretes resulting from the method and fly ash treated with sacrificial agent, or air entrainment agent/sacrificial agent combinations, and processes for selecting suitable sacrificial agents.